REMARKS

Claims 51, 66, 76, 79 & 80 have been amended to correct typos. Applicants respectfully submit that these typos were obvious errors, that the corrections do not change the scope of the claims, and that the changes were not in response to any rejection.

Claims 60, 75 and 94 have been amended to correct formal problems. Applicants respectfully submit that these corrections do not narrow the claims and were not in response to any rejection.

Claim objections

These objections appear to be repeated from the prior office action. In the prior amendment the following argument was advanced in response to these objections:

> With respect to paragraph 7 of the office action, this objection is respectfully traversed. The Examiner's attention is directed to the cases of In re Moelands, 3 USPQ 2d 1474 (Bd. Pat. Appls. 1987) and In re Porter, 25 USPQ2d 1144 (Bd. Pat. Appls. 1992) both of which authorize this type of claim.

In the present office action, the Examiner repeats the objection without responding to the previously presented argument. Applicants respectfully submit that this is improper. Correction is respectfully requested.

Art rejections: general comments

The art rejections are respectfully traversed.

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Since the reference is complex, Applicants will confine their remarks to those portions cited by the Examiner, except as otherwise indicated. Applicants make no representation as to the contents of other portions of the reference.

Any of the Examiner's rejections and/or points of argument that are not addressed below would appear to be moot in view of the following. Nevertheless, Applicants reserve the right to respond to those rejections and arguments and to advance additional arguments at a later date. No arguments are waived and none of the Examiner's statements are conceded.

The Examiner has not adequately demonstrated that the Chang document is prior art in view of the 131 declarations that have been submitted.

Moreover, if the Examiner's rejection is based on the filing date of the provisional application for Chang, then Applicants respectfully submit that the Examiner must make that provisional of record and demonstrate how that provisional allegedly anticipates the invention.

Correction is accordingly respectfully requested.

Claims 10 & 64

Applicants respectfully submit that the Examiner has not adequately demonstrated that the indexing scheme of Chang falls within a reasonable interpretation of the phrase "constructs of a mapping language." Applicants enclose a copy of p. 1 of the definition of "language" from the online encyclopedia "wikipedia.org." According to this definition, "a language is a system of symbols, generally known as lexemes and the rules by which they are manipulated." Applicants do not believe that a mere indexing teaches or suggests a language. In fact, the indexing scheme of the reference appears to chop up XML documents into a table, rather than being a use of constructs of a mapping language. This rejection is accordingly respectfully traversed.

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Claim 64 is analogous.

Claims 90, 94, and 96

These claims recite inserting constructs into a DTD to create an annotated DTD.

Against this recitation, the Examiner cites col. 12, line 40. This portion of the reference relates to a DTD table with metadata information. Applicants respectfully submit that a DTD table is not a DTD. Perhaps a DTD can be generated from it, but it fails to teach or suggest an annotated DTD.

Also, in the table of col. 12, lines 50-60, the DTD is in the storage area called "content," while the meta data is in a separate place called "info1" and "info2." Accordingly, there is no teaching or suggestion of inserting constructs into a DTD.

Claims 76, 79 & 80

These claims recite, multiple heterogeneous data sources, using a single DTD corresponding to multiple data sources, creating an annotated DTD, and that a document generated from the annotated DTD is guaranteed to conform to the DTD.

For multiple heterogeneous data sources, the Examiner cites Fig. 3, the File System nd DB2. Applicants respectfully submit that the Examiner is misconstruing the reference here. The File System 500 is a data source. However, as the Examiner points out later, DB2 has DTD information. The Examiner appears to be reading both the DTD and the data source limitations on the same item in the drawing, namely DB2 (300). Applicants respectfully submit that this is improper.

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The Examiner states without support in the document that there is a single DTD for multiple heterogeneous data sources. Column 15, lines 50-67, cited by the Examiner, teaches multiple XML documents having a single DTD, *not* multiple data sources. Moreover, the assumption in this portion of the reference is that the XML document is given. By contrast, the claim recites *generating* an XML document.

The allegation that col. 12, lines 34-60 teaches adding annotations to the DTD is refuted analogously to the arguments in the prior section relating to adding constructs of a mapping language to a DTD.

Applicants accordingly respectfully submit that the Examiner has failed to put forth a *prima facie* case against this group of claims.

Claims 87 and 93

These claims, similarly to those in the previous section, contain the limitations of at least two data sources and that the sources are of different types. The Examiner cites the same parts of the reference again here. As stated before, the two files cited by the Examiner are not both data sources. One contains DTD information. The rejection is accordingly respectfully traversed.

Claims 16, 51, & 66

These claims recite that the constructs comprise at least one of a value specification and a binding specification.

Against this recitation, the Examiner cites portions of the reference that he believes teach value specification or binding specification. Applicants have looked at these portions and do not see this -- moreover the claims do not merely recite value specification or binding specification.

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They recite that the constructs inserted into the DTD are one of these. As far as Applicants can tell, the reference wholly fails to teach or suggest this concept, or indeed the insertion of any constructs into a DTD. Applicants accordingly respectfully submit that the Examiner has failed to make a *prima facie* case against these claims.

Claims 19, 52, 67

These claims recite that at least one of the constructs comprises a parameter. Note that this is one of the constructs that is being inserted into a DTD. The claims further recite that a value of the parameter is determinable at a time of generation of at least one respective XML element associated with a construct.

The Examiner looks to col. 20, line 63 for parameters. The parameters here do not appear to be constructs inserted into a DTD.

The Examiner then points to col. 22-23 for the determination of the values of the parameters, but the parameters in this second section appear to be wholly different parameters, from those cited in col. 20. The parameters of col. 22 appear to be related to retrieving XML documents, rather than to generating such documents, unlike the claimed invention. With respect to the updates referred to in col. 23 of the reference, Applicants are again unable to discern how the parameters are in constructs inserted into a DTD. Also it does not appear that XML documents are being generated, as claimed, but rather updated.

Applicants accordingly respectfully submit that the Examiner has failed to make a *prima facie* case against this group of claims.
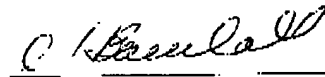
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<u>Claims 37, 58, and 73</u>

These claims recite associating an environment with a respective XML element to be

generated. The term "environment" is defined in the specification at the last line of page 31 and

first line of page 32. This definition states 'a set of variable/value pairs

called the "environment."'

Against this recitation, the Examiner cites a portion of the reference which refers to an

XML table. Applicants are at a loss to understand how this table relates to an "environment" as

defined by Applicants in their specification. Clarification is respectfully requested.

Applicants respectfully submit that they have addressed each issue raised by the

Examiner - except for any that were skipped as moot - and that the application is accordingly in

condition for allowance. Allowance is therefore respectfully requested.

Please charge any fees other than the issue fee to deposit account 50-0510. Please

credit any overpayments to the same account.

Respectfully submitted by,

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1/6/06

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Language

From Wikipedia, the free encyclopedia.

Language Portal

A **language** is a system of symbols, generally known as lexemes and the rules by which they are manipulated. The word *language* is also used to refer to the whole phenomenon of language, i.e., the common properties of languages. Though language is commonly used for communication, it is not synonymous with it.

Human language is a natural phenomenon, and language learning is instinctive in childhood. In their natural form, human languages use patterns of sound or gesture for the symbols in order to communicate with others through the senses. Though there are thousands of human languages, they all share a number of properties from which there are no known deviations.

Humans have also invented (or arguably in some cases discovered) many other languages, including constructed human languages such as Esperanto or Klingon, programming languages such as Python or Ruby, and various mathematical formalisms. These languages are not restricted to the properties shared by natural human languages.

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Properties of language

Languages are not just sets of symbols. They also contain a grammar, or system of rules, used to manipulate the symbols. While a set of symbols may be